

## Department of Energy

Ohio Field Office  
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17 DEC 2001

Mr. James A. Saric, Remedial Project Manager  
United States Environmental Protection Agency  
Region V, SRF-5J  
77 West Jackson Boulevard  
Chicago, IL 60604-3590

DOE-0178-02

Mr. Tom Schneider, Project Manager  
Ohio Environmental Protection Agency  
401 East 5<sup>th</sup> Street  
Dayton, OH 45402-2911

Dear Mr. Saric and Mr. Schneider:

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE  
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY  
STUDY/CONSENT DECREE MONTHLY REPORT FOR THE PERIOD NOVEMBER 1, 2001  
THROUGH NOVEMBER 30, 2001 INCLUDING ANTICIPATED WORK FOR THE PERIOD  
DECEMBER 1, 2001 THROUGH DECEMBER 31, 2001**

This letter transmits the Consolidated Consent Agreement/Federal Facility Compliance Agreement/Federal Facility Agreement/Remedial Investigation/Feasibility Study/Consent Decree Monthly Report for the period November 1, 2001 through November 30, 2001, including anticipated work for the period December 1, 2001 through December 31, 2001. This report is formatted to reflect the proposal presented in the letter, DOE-0395-96, J. Reising to J. A. Saric and T. Schneider, "Phase VII Removal Actions and Reporting Requirements under the FEMP Legal Agreements," dated January 16, 1996, and agreed to by the United States Environmental Protection Agency and Ohio Environmental Protection Agency.

Mr. James A. Saric  
Mr. Tom Schneider


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If you have any questions, please contact me at (513) 648-3139.

Sincerely,



Johnny W. Reising  
Fernald Remedial Action  
Project Manager

FEMP:Reising

Enclosures: As Stated

cc w/enclosures:

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A. Tanner, OH/FEMP  
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STUDY/CONSENT DECREE MONTHLY REPORT NOVEMBER 1, 2001 THROUGH  
NOVEMBER 30, 2001, INCLUDING ANTICIPATED WORK FOR THE PERIOD  
DECEMBER 1 THROUGH DECEMBER 31, 2001**

**Introduction**

This report describes actions at the Fernald Environmental Management Project (FEMP) from November 1 through November 30, 2001 and includes the anticipated work for the period December 1 through December 31, 2001. The monthly report has been revised to reflect the proposal presented in the letter, DOE-0395-96, J. Reising to J.A. Saric and T. Schneider, "Phase VII Removal Actions and Reporting Requirements under the FEMP Legal Agreements", dated January 16, 1996, and agreed to by USEPA and OEPA.

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**OPERABLE UNIT 1 - WASTE PITS REMEDIAL ACTION PROJECT**

November 2001

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Continued/Completed
  - Loaded 10,981.4 tons of material from waste pits
  - Shipped 120 railcars (UT 48 and UT49) of material for disposal at Envirocare

December 2001 (Anticipated)

- Enforceable Milestones To Be Completed
  - None
- Major Work To Be Initiated/Continued/Completed
  - Load 10,768 tons of material from waste pits
  - Ship 120 railcars (UT 50 & UT 51) of material for disposal at Envirocare

**OPERABLE UNIT 2 - ON-SITE DISPOSAL FACILITY AND SOIL CHARACTERIZATION AND  
EXCAVATION PROJECT**

**Additional OU2 soils-related activities reported under OU5/Soils  
Characterization and Excavation Project**

November 2001

- Enforceable Milestones Completed
  - On-Site Disposal Facility (OSDF)
    - None
  - Soil Characterization and Excavation Project (SCEP)
    - None
- Major Work Initiated/Continued/Completed
  - On-Site Disposal Facility
    - Placed approximately 62,500 in-place cubic yards of impacted material in cells
    - Began permanent seeding of Cell 1 Cap
    - Completed screening of clay for Cells 4 and 5 liners
    - Completed filter layer placement on northwest and west to Cell 1 Cap

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- Continued placement of impacted material in Cell 2 Catchment Area
- Began placement of impacted material from the Leachate Removal Project into Cells 2 and 3
- Began Phase II leachate Removal Project
- Received approval on the Revised Impacted Material Placement Plan (IMPP) and Construction Quality Assurance; Transite Placement Change Pages from Ohio EPA on November 8, 2001 and USEPA on November 14, 2001
- Completed Phase I Leachate Removal project
- Soil Characterization and Excavation Project (SCEP)
  - Awarded Contract FSC 653, Area 3A/4A Excavation/OSDF Phase IV Project to IT Corporation (Base contract only awarded - no options included) on November 8, 2001
  - Continued developing Environmental Assessment for future public use of the FEMP
  - Began the Area 3A Isolation Trenching activities
  - Continued developing 2001 Restored Area Monitoring Report for Area 1, Phase I Wetland and Area 8, Phase II
  - Began to prepare revised Stewardship plan for submittal to DOE
  - Began certification sampling at Area 2, Phase I Certification units NWU-1, 2, 3, 4, and IFP-3
  - Continued predesign efforts in the Arsenic Hot Spot Area
  - Completed Air Gaps in Area 3A Southeast, Northwest, and Northeast quadrants
  - Began Area 2, Phase II Title I Design
  - Continued Area 3B/4B/4 Title I Design
  - Began Area 1, Phase II certification of the Equipment Wash Facility and Drain Line
  - Began RCRA and Above OSDF Waste Acceptance Criteria (WAC) soil stockpile preparation for soil from Building 12 and 10D Burn Pad

**December 2001 (Anticipated)**

- Enforceable Milestones To Be Completed
  - On-Site Disposal Facility (OSDF)
    - None
- Soil Characterization and Excavation
  - None

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- Major Work To Be Initiated/Continued/Completed
  - On-Site Disposal Facility
    - Complete placement of impacted material from the Leachate Removal Project into Cells 2 and 3
    - Complete Cell 2 and 3 winterization
    - Complete installation of erosion mat for Cell 1 Cap
    - Complete Cell 1 Cap
    - Complete Phase II Leachate Removal project
    - Begin removing remaining stockpile material southeast of C-4
    - Begin Test Pits at Borrow Area
    - Continue Access Control Facility Project
    - Begin and complete Cell 1 Cap monitoring instrumentation
    - Begin OSDF Access Control work
  - Soil Characterization and Excavation
    - Continue developing Environmental Assessment for future public use of the FEMP
    - Continue developing 2001 Restored Area Monitoring Report for Area 1, Phase I Wetland and Area 8, Phase II
    - Prepare Revised Stewardship plan for submittal to DOE
    - Begin and complete Air Gaps/Plugs in Area 4A
    - Complete the Area 3A Isolation Trenching activities
    - Continue Area 2, Phase II Title I Design
    - Complete Area 2, Phase II Sampling and Analysis at the Arsenic Hot Spot
    - Continue Area 3B/4B/5 Title I Design
    - Begin Area 6 (Solid Waste Landfill and Fire Training Facility) Title I Design
    - Respond to OEPA comments on Solid Waste Landfill and Fire Training Facility Pre-design PSP
    - Begin Certification sampling in Area 9, Phase I
    - Begin pre-design sampling in Area 3B/4B/5 under the PSP for Area 4B potentially characteristic area and west of the Pilot Plant pre-design
    - Complete Area 1, Phase II Equipment Wash Facility Certification Sampling - Submit Addendum to the A1,PII Certification Report
    - Begin RCRA and WAC soil excavation at Building 12 and 10D Burn Pad and stockpile at AR6-003 and Building 61
    - Start and complete Area 4A (Plant 5) Isolation Trenching activities

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**OPERABLE UNIT 3 - FACILITIES CLOSURE AND DEMOLITION PROJECT**

**November 2001**

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Continued/Completed
  - Plant 6
    - Area 1
      - Continued exterior transite removal
      - Began structural demolition
    - Area 2
      - Continued exterior transite removal
      - Began structural demolition
    - Area 3
      - Completed structural demolition
    - Area 6A
      - Continued miscellaneous activities and housekeeping
    - Area 7
      - Completed structural demolition
  - Facilities Shutdown
    - Began excavation in Area 3A and 4A
    - Began isolation of the domestic water to the OSDF
    - Continued Vitrification Plant equipment removal
    - Began Building 53A furniture breakdown and removal
  - Multi-Complex
    - Established construction area, installed electric service, established building enclosure and vestibule in Building 2A and 8A
    - Completed Hazardous Waste Management Unit (HWMU) #47 cleaning and preparing HWMU #48, #49 and #10 areas
    - Began gross lockdown/exterior transite removal in Area 2F
    - Began asbestos glovebag removal, in Building 8B, 3H and 18B
    - Began lead removal, gutters/flashing abatement, final clean of VAT area, release clean and lockdown area in Building 8B

**December 2001 (Anticipated)**

- Enforceable Milestones To Be Completed
  - None

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- Major Work To Be Initiated/Continued/Completed
  - Multi-Complex Task 1
    - Continue mobilization
    - Continue to establish construction area, install electric service, establish building enclosure and vestibule in Building 2A
    - Complete Hazardous Waste Management Unit (HWMU) #47 cleaning and preparing HWMU #48, #49 and #10 areas
    - Begin wash down and remove windows and exterior transite removal in Area 2F
    - Continue asbestos glovebag removal, in Building 8A
    - Continue lead removal, gutters/flashing abatement Building 8B
    - Establish building enclosure and install vestibules in Building 8G and 8H
  - Plant 6
    - Area 1 and 2
      - Begin exterior transite removal
    - Area 6A
      - Continue miscellaneous activities and housekeeping
    - Area 7
      - Continue transite removal
  - Facilities Shutdown
    - Continue excavations in Area 3A and 4A
    - Continue furniture breakdown and removal in Building 53A
    - Remove equipment in Vitrification Plant

**OPERABLE UNIT 4 - SILOS PROJECT**

November 2001

- Enforceable Milestones Completed
  - None
- Major Work Initiated/Continued/Completed
  - Continued Silos 1 and 2 conceptual design activities, including development of process flow diagrams and general arrangements, development of support facility (storage and staging areas site preparation) designs, and development of container design
  - Continued Silo 3 conceptual design activities - development of treatment process and retrieval designs, and data development testing to finalize treatment formulation
  - Continued preparation of the revised Silo 3 Remedial Design package
  - Completed Due Diligence review of the Accelerated Waste Retrieval (AWR) project balance of plant design. Prepared design changes resulting from Due Diligence review of the Radon Control System (RCS) design



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- Continued AWR Project construction activities - erected the RCS exhaust stack, began erection of the Transfer Tank Area (TTA) tanks, and began interior modification of the RCS air handling building

**December 2001 (Anticipated)**

- Enforceable Milestones To Be Completed
  - None
- Major Work To Be Initiated/Continued/Completed
  - Continue Silos 1 and 2 conceptual design activities
  - Compile Conceptual Design Package for the Silo 3 Project, in preparation for formal Fluor Fernald and DOE review in January
  - Continue preparation of Silo 3 Remedial Design Package
  - Prepare design changes resulting from Due Diligence reviews of the Radon Control System (RCS) and AWR balance of plant designs
  - Continue AWR project construction activities - take delivery of two of the four RCS carbon beds, continue erection of TTA tanks, install enhanced foundations for RCS pipe rack

**OPERABLE UNIT 5 - AQUIFER RESTORATION AND WASTEWATER PROJECT**

**November 2001**

- Enforceable Milestones Completed
  - Submitted monthly NPDES Discharge Monitoring Report for October to the Ohio EPA on November 19, 2001
  - Met the monthly average uranium discharge to Great Miami River as required by OU5 Record of Decision
- Work Initiated/Continued/Completed
  - Submitted the August 2001 Operating Report for the Re-Injection Demonstration on November 15, 2001 to DOE for transmittal to the Agencies on November 28, 2001
  - Submitted the September 2001 Operating Report for the Re-Injection Demonstration on November 15, 2001 to DOE for transmittal to the Agencies on November 19, 2001
  - Submitted a Project Specific Plan (PSP) for the installation of monitoring wells in the Pilot Plant Drainage Ditch Plume on November 19, 2001 for transmittal to the Agencies on November 19, 2001

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- Continued work on the technical memorandum to establish baseline groundwater conditions for OSDF Cells 1, 2, and 3. A data package is scheduled to be submitted to the Agencies by the end of December

**December 2001 (Anticipated)**

- Enforceable Milestones To Be Completed
  - Submit monthly NPDES Discharge monitoring Report to the OEPA
  - Meet the monthly average uranium discharge to Great Miami River as required by OU5 Record of Decision
- Work To Be Initiated/Continued/Completed
  - Continue to perform maintenance/rehabilitation on injection and extraction wells
  - Continue construction of Waste Storage Area Extraction System - Phase I and South Field Extraction System - Supplemental Well. Project completion dependent on pump delivery
  - Continue to work on OSDF baseline technical memorandum for groundwater (perched and Great Miami Aquifer)
  - Begin design of South Field Extraction System - Phase II
  - Begin work on PSPs for geoprobing and installation of additional monitoring wells in the South Field and South Plume Areas

**WASTE MANAGEMENT**

**November 2001**

- Enforceable Milestones Completed
  - None
- Work Initiated/Continued/Completed
  - Advanced Waste Water Treatment (AWWT) Liquids
    - Received Waste Water Discharge Request (WWDR) approval for AWWT 1012 and 1016
  - Hazardous Waste Project
    - Shipped 22 labpacks and 5 non-bulk drums, 5 bulk boxes and 4 cylinders of packaged free-released chemicals to Heritage on November 8, 2001. Shipped 10 gallons of silver recovery cartridges and 20 gallons of x-ray negative film with Safety Kleen on November 14, 2001
  - Inorganic Treatment Project
    - Contracted PDC to support acceleration of the Inorganic Treatment Project

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- Incinerator Liquids (Liquid Mixed Waste Bulking Project)
  - Bulked waste from 132 containers of Batch 12 of which 118 were bulked to empty
  - Submitted Batch 11 application to the TSCA incinerator and State of Tennessee
- Neutralization/Precipitation/Deactivation/Stabilization Project (NPDS)
  - Completed processing of 1 box of NPDS thorium for a total of 10 of 10
  - Completed RTR of 2 of 10 boxes for a total of 10 of 10
  - Completed first shipment of NPDS Thorium
- Organic Treatment Project
  - Completed first shipment of First Article Test Drums to Materials and Energy Corporation (M&EC)
  - Reviewed containers assigned to Aerosol Can Puncturing for acceptability
- Sample Disposition
  - Contracted Performance Development Corporation (PDC) to support acceleration of the Sample Disposition Project
- Thorium Legacy Waste Project (TLWP)
  - Completed SSR for venting and decanting operations
  - Moved 15 boxes soil, 5-110 gallon drums, 8 metal boxes, and 1 metal box generated by overpacking drums and cans from Building 65 to Building 64
  - Moved 26 boxes and 6-110 drums from Building 64 to Plant 1 Pad
- Waste Minimization/Pollution Prevention
  - Finalized Annual Report of Waste Generation and Pollution Prevention Progress

**December 2001 (Anticipated)**

- Enforceable Milestones To Be Completed
  - None
- Work To Be Initiated/Continued/Completed
  - Advanced Waste Water Treatment (AWWT) Liquids
    - Initiate TO 2002-027 operations with AWWT transfer of AWWT 1012 and AWWT 1016 waste inventory
    - Continue activities for future staging/transfer wastewater treatment operations at Building 79
  - Hazardous Waste Project
    - Finalize Legacy Chemical Work Plan
    - Begin consolidation movement of legacy chemicals
  - Incinerator Liquids (Liquid Mixed Waste Bulking Project)
    - Continue Batch 12 bulking activities
    - Complete consolidation tank location at bulking area
    - Initiate operations for TSCA campaign oil/water separator candidates

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- Inorganic Treatment Project
  - Initiate and complete construction of Mixed Waste Processing Enclosure
  - Begin evaluation of funding proposed to manage and disposition broken/contaminated lead acid batteries
- Neutralization/Precipitation/Deactivation/Stabilization Project (NPDS)
  - Complete thorium shipments
- Organic Treatment Project
  - Complete campaign development for current uncharacterized inventory
  - Await Waste Characterization release activities for the 15 submitted organic campaigns
  - Sample Fire Training Facilities soil boxes
- Sample Disposition
  - Develop additional Sample Disposition Campaigns
  - Commence Building 68 preparations for sample disposition operation pending completion of Aerosol Can Puncturing Project
- Thorium Legacy Waste Project (TLWP)
  - Continue movement of thorium inventory from Building 64/65
  - Perform drum venting operations